



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 1
5 POST OFFICE SQUARE, SUITE 100
BOSTON, MASSACHUSETTS 02109-3912

Clean Air Act Inspection Report

Drafted: August 5, 2022

Finalized: September 7, 2022

EPA Inspector: Davianna Vasconcelos, Environmental Engineer, Air Compliance Section

EPA Reviewer: Darren Fortescue, Senior Enforcement Coordinator, Air Compliance Section
/DEF/

Date of Inspection: August 3, 2022

Facility Name: Shell Oil Products US

ICISAir ID#: CT0000000900900001

Facility Location: 481 Connecticut Ave, New Haven, CT 06512

Mailing Address: Same as above

Disclaimer:

Unless otherwise noted, this report describes conditions at the facility/property as observed by EPA inspector(s), and/or through records provided to and/or information reported to EPA inspector(s) by facility representatives and as understood by the inspector(s). This report may not capture all operations or activities ongoing at the time of the inspection. This report does not make final determinations on potential areas of concern. Nothing in this report affects EPA's authorities under federal statutes and regulations to pursue further investigation or action.

Inspection Attendees:

| Name | Title | Organization |
|----------------------|--|--------------|
| Davianna Vasconcelos | Environmental Engineer | EPA, R1 |
| Hannah Patel | Environmental Scientist | EPA, R1 |
| Nicholas Bobbs | Environmental Engineer | EPA, HQ |
| Mark Potash | Supervising Air Pollution Control Engineer | CT DEEP |
| Rachel Steel | Air Pollution Control Engineer II | CT DEEP |
| Ramon Martinez | Terminal Manager | Shell Oil |
| Theresa Geijer | Environmental Advisor | Shell Oil |
| Mike Sullivan | Facilities Manager | Shell Oil |

Facility/Process Description:

The facility located at 481 Connecticut Ave, New Haven, Connecticut was purchased by Motiva Shell, a joint venture between Shell Oil Products and Saudi Aramco, in approximately 2009. The facility is currently solely owned by Shell Oil Products (“Shell”).

The facility receives petroleum products, including regular gasoline and premium gasoline, from barges and stores the materials in 18 storage tanks, 8 of which are commissioned for gasoline. The facility distributes the products by loading them into trucks via a loading rack. The facility does not load gasoline onto barges however it does load distillate onto vessels. The facility does not distribute gasoline via pipeline however it does distribute jet fuel and clear diesel via pipeline.

Number of Employees and Working Hours:

Shell employs 11 employees at the facility and over 100 employees worldwide.

The facility operates 24 hours a day, 7 days a week, 52 weeks a year.

Potentially Applicable Clean Air Act Requirements:

- 40 CFR Part 60 Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels
- 40 CFR Part 60 Subpart XX - Standards of Performance for Bulk Gasoline Terminals
- 40 CFR Part 63 Subpart R - National Emission Standards for Gasoline Distribution Facilities (Bulk Gasoline Terminals and Pipeline Breakout Stations)
- Title V Operating Permit Number 117-0261-TV (Expiration Date: February 16, 2026)

Previous Enforcement Actions:

A “Detailed Facility Report” from EPA’s Enforcement and Compliance History Online database indicates that there have been no informal or formal enforcement actions taken against the facility in the last five years.

Opening Conference:

On August 3, 2022, at 8:20 am, EPA personnel Davianna Vasconcelos, Hannah Patel, and Nicholas Bobbs met CT DEEP personnel Mark Potash. The group proceeded to Shell Terminal located at 481 Connecticut Avenue New Haven, Connecticut, and met Ramon Martinez of Shell. Mr. Bobbs presented his credentials and explained that the purpose of the inspection was to conduct forward looking infrared (“FLIR”) monitoring of the gasoline storage tanks located at the facility, and to monitor the percent of the lower explosive limit (“%LEL”) of the headspace above the internal floating roofs (“IFR”) of the gasoline storage tanks.

Mr. Martinez explained that a vessel carrying regular gasoline was scheduled to arrive in the late morning and begin unloading to Tank 21 and Tank 24 at approximately noon. Mr. Bobbs and Mr. Martinez discussed which tanks and the order of which %LEL monitoring would take place.

Rachel Steel of CT DEEP arrived for the first day of a two-day Title V inspection that was to include reviewing applicable records with Theresa Geijer.

Facility Tour:

Mr. Martinez led Mr. Bobbs, Ms. Patel, Ms. Vasconcelos, and Mr. Potash through the facility for LEL monitoring. Mr. Potash conducted the FLIR monitoring using a FLIR camera to survey tank vents for emissions and recorded FLIR video when appropriate.

Inspection personnel conducted %LEL monitoring of the headspace of the IFRs on 7 gasoline storage tanks: Tank 29, Tank 21, Tank 2, Tank 3, Tank 26, and Tank 24. Mr. Bobbs operated a QRAE 3 %LEL Monitor with a 25-foot teflon sample line to conduct the monitoring. Ms. Patel recorded monitoring information on datasheets. Ms. Vasconcelos noted tank information including tank fill level, material temperature, barrels per foot, and gauge height which can be found in Attachment 1.

%LEL monitoring data was not available at the time of writing this inspection report.

Records Reviewed:

During the opening conference, Mr. Martinez provided inspecting personnel with a printed spreadsheet of tank inventory. During the closing conference, Mr. Martinez provided inspecting personnel with a printed spreadsheet of tank settings.

Closing Conference:

All personnel congregated and Mr. Sullivan, Facilities Manager for Shell, joined via phone. Mr. Sullivan explained that secondary wiper seals of the IFRs are replaced during out of service inspections regardless of seal lifetime. The group discussed past %LEL monitoring efforts of Tank 24, including in 2021 when the monitored %LEL was determined by EPA to be approximately 27%. Mr. Sullivan said that after the monitoring event a through the hatch visual observation was performed by a contractor. Mr. Sullivan said the inspection did not result in a finding that a leak had occurred, and no corrective actions were identified at that time. Facility representatives confirmed that a report was sent to EPA regarding the incident.

Mr. Martinez confirmed that maintenance, repair, and inspection records are kept on site. Mr. Martinez said that the facility had not reported any excess emission events in the last 12 months.

Ms. Vasconcelos explained that EPA will write an inspection report and it will be provided to Shell. Ms. Vasconcelos said that if any of the information supplied during the inspection is considered confidential business information, then the facility should let EPA know.

Inspection personnel left the facility at 3:20 pm.

Attachment 1: Monitored Tank Information

| Tank Number | Material Stored | Fill Level | Material Temperature | Gauge Height | Barrels/Feet |
|--------------------|---------------------------------|-------------------|-----------------------------|---------------------|---------------------|
| 29 | Premium gasoline | 27-3-3/4 | 80°F | 60-4-3/4 | 900 |
| 21 | Regular gasoline | 04-4-3/4 | 75 | 52-0-1/8 | 4500 |
| 2 | Regular gasoline | 04-7-1/4 | 78 | 56-5-5/8 | 2030 |
| 3 | Regular gasoline | 05-0-0 | 76 | 56-8-5/8 | 2030 |
| 32 | Regular gasoline (winter grade) | 09-10-1/2 | 77 | 58-1-3/4 | 725 |
| 26 | Premium gasoline | 05-4-1/8 | 78 | 56-8-1/8 | 1688 |
| 24 | Regular gasoline | 4-0-7/8 | 82 | 49-6-1/4 | 4500 |